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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PEREZ GUTIERREZ, RAFAEL

ART UNIT PAPER NUMBER

2686

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/914,853

Applicant(s)

Mullins et al.

Examiner

Rafael Perez-Gutierrez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. This Action is in response to Applicant's amendment filed on August 26, 2004. **Claims 1-19** are now pending in the present application. **This Action is made FINAL.**

Drawings

2. The proposed drawing corrections received on August 26, 2004 have been approved by the Examiner.
3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office Action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the Examiner, the Applicant will be notified and informed of any required corrective action in the next Office Action. If a response to the

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present Office Action fails to include corrected drawings, the response can be held **NON-RESPONSIVE** and/or the application could be **ABANDONED** since the objections/corrections to the drawings are no longer held in abeyance.

Specification

4. The abstract is objected to because of the following minor informality: On **line 4**, replace “a second” with --and a second satellite--. Appropriate correction is required.

Claim Objections

5. **Claims 16 and 18** are objected to because of the following minor informality: On **line 3** of **claims 16 and 18**, delete “is decoded” after “portion”. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless -- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-6, 10-12, and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by **Tayloe (U.S. Patent # 5,649,291)**, as applied in the first Office Action.

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Consider **claim 1**, Tayloe clearly shows, discloses, and claims a method of operating a subscriber unit (SU) 26 (mobile station) in a satellite cellular (mobile) telephone system 10 (figure 1 and claim 1), the method comprising the steps of:

decoding (inherent) all of a cell cluster list 54 (set of neighbouring cell data) (figure 4) transmitted in a broadcast channel to generate a cell cluster list 134 (neighbouring cell list) (abstract, figure 10, column 5 line 50 - column 6 line 6, column 7 lines 34-38, column 7 line 59 - column 8 line 7, column 11 lines 42-54, and column 14 lines 4-16);

making signal measurements for the cells 60 in said list 134 and a local cell 56 (current serving cell) (figures 4 and 10, column 9 lines 10-16 and 43-58, column 10 lines 35-40, column 11 lines 55-57, and column 14 lines 17-19);

decoding (inherent) a portion only of the set of cell cluster list 54 (set of neighbouring cell data) (figure 4) transmitted in a broadcast channel and modifying the cell cluster list 134 (neighbouring cell list) (figure 10) in dependence thereon (i.e., when the SU 26 (mobile station) receives a second list with some cells having a different broadcast channel and modifies the list 134 to link those cells) (abstract, column 9 lines 20-29, column 11 line 58 - column 12 line 2, column 14 lines 20-37); and

making signal measurements for the cells in said modified list and the local cell 56 (current serving cell) (column 9 line 43 - column 10 line 18, column 12 lines 3-6, column 14 lines 41-44).

Consider **claim 4**, and as applied to claim 1 above, Tayloe also shows and discloses that the cell cluster list 54 (neighbouring cell data) comprises information identifying a frequency

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(beacon frequency) for each cell (figure 4 and column 5 line 64 - column 6 line 6).

Consider **claim 5**, and **as applied to claim 1 above**, Tayloe further discloses and claims comparing said measurements for the cells in said modified list and the local cell 28, 56 (current serving cell) and if the best measurement is not for the local cell 28, 56 (currently serving cell), handing off (and consequently camping) on the cell 60 to which the best measurement applies (figures 4 and 10, column 10 lines 35-53, and column 12 lines 17-23).

Consider **claim 6**, and **as applied to claim 1 above**, Tayloe also shows and discloses a subscriber unit (SU) 26 (mobile station) for a satellite cellular (mobile) telephone system 10 (figure 1), the SU 26 (mobile station) comprising transceiver means (i.e., transmitter 116 and receivers 118, 120) and a controller 124 (control means), wherein the controller 124 (control means) is programmed so as to cause the SU 26 (mobile station) to operate according to **claim 1** (figures 1 and 6, column 8 line 34 - column 10 line 18, and claim 11).

Consider **claim 10**, Tayloe clearly shows, discloses, and claims a method of operating a subscriber unit (SU) 26 (mobile station) in a satellite cellular (mobile) telephone system 10 (figure 1 and claim 1) wherein the SU 26 (mobile station) is capable of communicating alternatively with a first satellite or a second satellite of the satellite cellular (mobile) telephone system 10 (figures 1 and 2), the method comprising:

on a plurality of occasions, receiving a cell cluster list 54 (set of neighbouring cell data) (figure 4) transmitted in a broadcast from one of the first and second satellites, the list 54 (set) comprising first and second data portions relating to communication with the first and second satellites, respectively (abstract, figure 10, column 5 line 50 - column 6 line 6, column 7 lines 34-

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38, column 7 line 59 - column 8 line 7, column 11 lines 42-54, and column 14 lines 4-16);

upon a first of the plurality of occasions, decoding the first and second data portions (abstract, figures 4 and 10, column 5 line 50 - column 6 line 6, column 7 lines 34-38, column 7 line 59 - column 8 line 7, column 9 lines 10-16 and 43-58, column 10 lines 35-40, column 11 lines 42-57, and column 14 lines 4-19); and

upon subsequent ones of the plurality of occasions, decoding only a selected one of the first and second data portions (abstract, column 9 lines 20-29, column 9 line 43 - column 10 line 18, column 11 line 58 - column 12 line 6, and column 14 lines 20-37 and 41-44).

Consider **claims 11 and 12**, and **as applied to claim 10 above**, Tayloe further disclose that only the second data portion is decoded upon subsequent ones of the plurality of occasions if cells with different broadcast channels are received (i.e., when the SU 26 (mobile station) receives a second list with some cells having a different broadcast channel and modifies the list (set) to link those cells) (no alert message is being received by the SU 26 (mobile station) to perform this step) (abstract, column 9 lines 20-29, column 11 line 58 - column 12 line 2, column 14 lines 20-37).

Consider **claim 15**, Tayloe also shows and discloses a subscriber unit (SU) 26 (mobile station) in a satellite cellular (mobile) telephone system 10 (figure 1) having a plurality of satellites (figures 1 and 2), the SU 26 (mobile station) comprising:

a transceiver (i.e., transmitter 116 and receivers 118, 120) capable of communicating alternatively with a first satellite or a second satellite of the plurality of satellites, the transceiver (i.e., transmitter 116 and receivers 118, 120) receiving a cell cluster list 54 (set of neighbouring

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cell data) (figure 4) transmitted in a broadcast from one of the first and second satellites on a plurality of occasions, the received list 54 (set) comprising first and second data portions relating to communication with the first and second satellites, respectively (abstract, figure 10, column 5 line 50 - column 6 line 6, column 7 lines 34-38, column 7 line 59 - column 8 line 7, column 11 lines 42-54, and column 14 lines 4-16); and

a decoder (not shown) to decode the received list 54 (set), the decoder configured to decode the first and second data portions upon a first of the plurality of occasions that the transceiver (i.e., transmitter 116 and receivers 118, 120) receives the list 54 (set), and to decode only a selected one of the first and second data portions upon subsequent ones of the plurality of occasions that the transceiver (i.e., transmitter 116 and receivers 118, 120) receives the list 54 (set) (abstract, figures 4 and 10, column 5 line 50 - column 6 line 6, column 7 lines 34-38, column 7 line 59 - column 8 line 7, column 9 lines 10-16 and 20-29, column 9 line 43 - column 10 line 18, column 10 lines 35-40, column 11 line 42 - column 12 line 6, and column 14 lines 4-37 and 41-44).

Consider **claims 16 and 17**, and **as applied to claim 15 above**, Tayloe further disclose that only the second data portion is decoded by the decoder (not shown) upon subsequent ones of the plurality of occasions if cells with different broadcast channels are received (i.e., when the SU 26 (mobile station) receives a second list with some cells having a different broadcast channel and modifies and stores in memory (data structure) the list (set) to link those cells) (no alert message is being received by the SU 26 (mobile station) to perform this step) (abstract, column 9 lines 20-29, column 11 line 58 - column 12 line 2, column 14 lines 20-37).

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Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. **Claims 2, 3, 13, 14, 18, and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Tayloe (U.S. Patent # 5,649,291)** in view of **Raith (U.S. Patent # 5,404,355)**, both as

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applied in the first Office Action.

Consider **claims 2 and 3**, and **as applied to claim 1 above**, Tayloe clearly shows and discloses the claimed invention except the steps of decoding a further portion of said set on reception of a decode instruction in the broadcast channel and modifying the neighbouring cell list in dependence thereon (claim 2), wherein the data in said portion changes more rapidly than the data in said further portion.

In the same field of endeavor, Raith clearly show and disclose a method of transmitting broadcast information in a digital control channel (broadcast channel) including, among other steps, the steps of decoding a further portion of overhead information (e.g., neighbouring cell data) on reception of a change flag (decode instruction) in the digital control (broadcast) channel (abstract and column 9 line 61 - column 2 line 18) and modifying the overhead information previously received in dependence thereon (i.e., replacing neighbouring cell information that has changed, as indicated by the change flag (decode instruction), since the last reception of the digital control (broadcast) channel) (column 14 line 62 - column 15 line 13, column 15 line 55 - column 16 line 26, and column 18 lines 19-31), wherein data in a portion of overhead information changes more rapidly than the data in said further portion of the overhead information (column 18 lines 41-60).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of Tayloe with the teachings of Raith in order to decode, as indicate by a change flag, further information received in the broadcast channel for the purpose of limiting battery drain at the mobile station (Raith; column 18 lines 28-31).

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Consider **claims 13 and 14**, and **as applied to claim 10 above**, Tayloe clearly shows and discloses that the list (set) is modified in response to decoding the first data portion (abstract, column 9 lines 20-29, column 11 line 58 - column 12 line 2, column 14 lines 20-37), however, Tayloe does not disclose that only the first data portion is decoded upon subsequent ones of the plurality of occasions if an alert message is received by the SU 26 (mobile station).

In the same field of endeavor, Raith clearly show and disclose a method of transmitting broadcast information in a digital control channel (broadcast channel) including, among other steps, the steps of decoding a first data portion of overhead information (e.g., neighbouring cell data) on reception of a change flag (alert message) in the digital control (broadcast) channel (abstract and column 9 line 61 - column 2 line 18) and modifying the overhead information previously received in dependence thereon (i.e., replacing neighbouring cell information that has changed, as indicated by the change flag (alert message), since the last reception of the digital control (broadcast) channel) (column 14 line 62 - column 15 line 13, column 15 line 55 - column 16 line 26, and column 18 lines 19-31).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of Tayloe with the teachings of Raith in order to decode, as indicate by a change flag, further information received in the broadcast channel for the purpose of limiting battery drain at the mobile station (Raith; column 18 lines 28-31).

Consider **claims 18 and 19**, and **as applied to claim 15 above**, Tayloe clearly shows and discloses that the list (set) is modified in response to decoding the first data portion (abstract, column 9 lines 20-29, column 11 line 58 - column 12 line 2, column 14 lines 20-37), however,

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Tayloe does not disclose that only the first data portion is decoded by the decoder (not shown) upon subsequent ones of the plurality of occasions if an alert message is received by the transceiver of the SU 26 (mobile station).

In the same field of endeavor, Raith clearly show and disclose a system of transmitting broadcast information in a digital control channel (broadcast channel) including, among other means, means for decoding a first data portion of overhead information (e.g., neighbouring cell data) on reception of a change flag (alert message) in the digital control (broadcast) channel (abstract and column 9 line 61 - column 2 line 18) and for modifying the overhead information previously received in dependence thereon (i.e., replacing neighbouring cell information that has changed, as indicated by the change flag (alert message), since the last reception of the digital control (broadcast) channel) (column 14 line 62 - column 15 line 13, column 15 line 55 - column 16 line 26, and column 18 lines 19-31).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the SU 26 (mobile station) of Tayloe with the teachings of Raith in order to decode, as indicate by a change flag, further information received in the broadcast channel for the purpose of limiting battery drain at the mobile station (Raith; column 18 lines 28-31).

9. **Claims 7 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Tayloe (U.S. Patent # 5,649,291)** in view of **Ohlson et al. (U.S. Patent # 6,396,826 B1)**, both as applied in the first Office Action.

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Consider **claim 7**, Tayloe clearly shows, discloses, and claims a method of operating a satellite cellular (mobile) telephone system 10 (figure 1 and claim 1), the method comprising the steps of:

transmitting a cell cluster list 54 (neighbouring cell data) (figure 4) in a broadcast channel, the cell cluster list 134 (neighbouring cell list) comprising cells served by a first satellite (first portion) and cells served by a second satellite (second portion) (abstract, figures 4 and 10, column 5 line 50 - column 6 line 6, column 7 lines 34-38, column 7 line 59 - column 8 line 7, column 9 lines 10-16 and 43-58, column 10 lines 35-40, column 11 lines 42-57, and column 14 lines 4-19); and

transmitting a cell cluster list 54 (neighbouring cell data) (figure 4) in the broadcast channel, wherein a portion of the list 54 has been modified (abstract, column 9 lines 20-29, column 9 line 43 - column 10 line 18, column 11 line 58 - column 12 line 6, column 14 lines 20-37 and 41-44).

However, Tayloe does not specifically disclose that the first satellite is in an orbit having a first plane and the second satellite is in an orbit having a second, different plane.

In the same field of endeavor, Ohlson et al. clearly disclose a method of operating a mobile satellite telephone system that includes transmitting neighbouring cell data that includes data related to cells served by a current service satellite (inherently located in an orbit having a first plane) and data related to cells served by nearby satellites (second satellite) (which is located in an orbit having a second, different plane), wherein the data related to nearby satellites is modified according to the movement between the current satellite and the nearby satellites

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(column 40 lines 26-50).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of Tayloe with the teachings of Ohlson et al. in order to provide the most current information regarding neighboring cells to the mobile station by transmitting changes in the broadcast information.

Consider **claim 8**, and **as applied to claim 7 above**, Tayloe as modified by Ohlson et al. discloses the claimed invention and, in addition, Tayloe also shows and discloses that the cell cluster list 54 (neighbouring cell data) comprises information identifying a frequency (beacon frequency) for each cell (figure 4 and column 5 line 64 - column 6 line 6).

10. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Tayloe (U.S. Patent # 5,649,291)** in view of **Ohlson et al. (U.S. Patent # 6,396,826 B1)**, **as applied to claim 8 above**, and further in view of **Raith (U.S. Patent # 5,404,355)**, each as applied in the first Office Action.

Consider **claim 9**, and **as applied to claim 8 above**, Tayloe as modified by Ohlson et al. clearly show and disclose the claimed invention except the step of transmitting a decode instruction when data in the first portion of the cell data is modified.

In the same field of endeavor, Raith clearly show and disclose a method of transmitting broadcast information in a digital control channel (broadcast channel) including, among other steps, the step of transmitting a change flag (decode instruction) in the digital control (broadcast) channel when a first portion of the broadcast information has been modified (abstract, column 9

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line 61 - column 2 line 18, column 14 line 62 - column 15 line 13, column 15 line 55 - column 16 line 26, and column 18 lines 19-31 and 41-60).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combined teachings of Tayloe and Ohlson et al. with the teachings of Raith in order to transmit a change flag when information in the broadcast channel has changed for the purpose of limiting battery drain at the mobile station (Raith; column 18 lines 28-31).

Response to Arguments

11. Applicant's arguments filed August 26, 2004 have been fully considered but they are not persuasive.

In the present application, Applicant argues, on page 10 of the remarks, that, in Tayloe, the data packet containing the cell list is completely decoded and stored in the cell cluster list in step 132.

The Examiner respectfully disagrees with Applicant's argument because Tayloe clearly claims in claim 1 that only some candidate target cells of the second list are identified (based on the cell ID) and linked together for measurement. The claimed second list is not, contrary to Applicant's argument, decoded completely.

Additionally, Applicant further argues, on pages 11 and 12 of the remarks, that Tayloe does not teach any differentiation between neighboring cell data associated with a first satellite

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and neighboring cell data associated with a second satellite other than a satellite ID and that there is no suggestion or indication in Tayloe that data be apportioned into first and second portions relating to the first and second satellites.

The Examiner respectfully disagrees with Applicant arguments because Tayloe clearly disclose the use of satellite IDs to differentiate frequency assignment data (i.e., frequency and time slot) among each of the satellites 12 in the cell cluster list 54 (column 5 line 61 - column 6 line 6 and column 6 lines 59-67). These IDs, among other information, are later use to modify the cell cluster list 134 stored in the SU 26 (mobile station) (column 9 lines 19-36). As shown in figures 4 and 10, the satellite ID, among other information, differentiate data portion in the cell cluster list.

Therefore, in view of the above reasons, and having addressed each of Applicant's arguments, the previous rejection is maintained and made FINAL by the Examiner.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any response to this Office Action should be **faxed to (703) 872-9306 or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

220 S. 20th St.
Crystal Plaza Two, Lobby, Room 1B03
Arlington, VA 22202

14. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Rafael Perez-Gutierrez whose telephone number is (703) 308-8996. The Examiner can normally be reached on Monday-Thursday from 6:30am to 5:00pm.

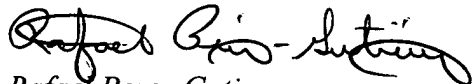
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent

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Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700 or call customer service at (703) 306-0377.



Rafael Perez-Gutierrez

R.P.G./rpg

RAFAEL PEREZ-GUTIERREZ
PATENT EXAMINER

January 24, 2005